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| APPLICATION NO.         | FILING DATE                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|-------------------------------------|----------------------|---------------------|------------------|
| 10/534,250              | 03/09/2006                          | Hirofumi Akagi       | 4639-003            | 4964             |
| 22429<br>LOWE HAUP      | 7590 03/30/2007<br>ΓMAN BERNER, LLP | EXAMINER             |                     |                  |
| 1700 DIAGONAL ROAD      |                                     |                      | BERHANE, ADOLF D    |                  |
| SUITE 300<br>ALEXANDRIA | A, VA 22314                         |                      | ART UNIT            | PAPER NUMBER     |
|                         | ,                                   |                      | 2838                |                  |
|                         |                                     |                      |                     |                  |
| SHORTENED STATUTOR      | Y PERIOD OF RESPONSE                | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS                |                                     | 03/30/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  | Application No.   | Applicant(s)    |  |  |  |
|--|---|-----------------|--|--|--|
|  | 10/534,250  | AKAGI, HIROFUMI |  |  |  |
| Office Action Summary  | Examiner  | Art Unit        |  |  |  |
|  | Adolf Berhane   | 2838            |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |                 |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                 |  |  |  |
| Status   |   |                 |  |  |  |
| 1) Responsive to communication(s) filed on   |   |                 |  |  |  |
|  |   |                 |  |  |  |
| ,  | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                 |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |                 |  |  |  |
| Disposition of Claims  |   |                 |  |  |  |
| 4) Claim(s) is/are pending in the application.   |   |                 |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |                 |  |  |  |
| 5) Claim(s) is/are allowed.  |   |                 |  |  |  |
| 6) Claim(s) is/are rejected.   |   |                 |  |  |  |
| 7) Claim(s) is/are objected to.  |   |                 |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.   |                 |  |  |  |
| Application Papers   |   |                 |  |  |  |
| 9) The specification is objected to by the Examiner  |   |                 |  |  |  |
| •  |   | ivaminor        |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |                 |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                 |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                 |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                 |  |  |  |
|  |   |                 |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |   |                 |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |                 |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |                 |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |                 |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |                 |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |                 |  |  |  |
|  |   |                 |  |  |  |
| Attachment(s)  |   |                 |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |                 |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date  |   |                 |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:  |   |                 |  |  |  |
| · · · · · · · · · · · · · · · · · · ·  |   |                 |  |  |  |

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#### **DETAILED ACTION**

#### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

2. The examiner has considered the information disclosure statement (IDS) submitted on 5/10/05.

### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ayano et al. (6,377,479).

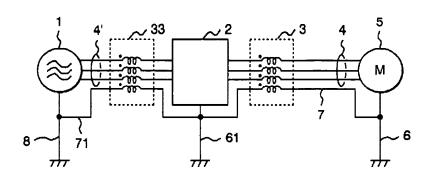
Ayano et al. disclose a power conversion system in Figs. 1, 4, 8, 12 and 13. A common mode choke (3) connected between alternating current output terminals of the power converter (2) and input terminals of the alternating current circuit (5) and connecting means (7) that connects an outgoing line from a neutral point (6) of the alternating current circuit to a reference potential point having little potential variation at a power source system side of the power converter, resistors (92) and capacitors (91). Applicant further argues that Figs. 9-13 of Ayano, line 7 does not connect a neutral point of motor 5 to a reference potential point. The neutral point of motor 5 is at element 6,

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which, as illustrated in Figs. 9-13 of Ayano, is not connected by line 7 to the reference potential point. Applicant's attention is directed to Fig. 8 shown below which clearly shows the neutral point of motor 5 elements 6, which is connected to line 7.

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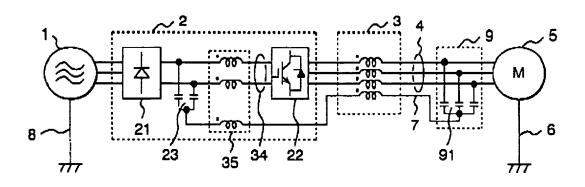
FIG. 8



Applicant further argues that the common mode choke is not connected to the direct current voltage input. Applicant's attention is directed to Fig. 11, which shows common

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# FIG. 11



mode choke (35) connected to the input of the direct current voltage.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolf Berhane whose telephone number is 571-272-2077. The examiner can normally be reached on Monday- Friday 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Adolf Berhane Primary Examiner Art Unit 2838